

# Systems Thinking: A Journey into the Wild

## An online interactive training course

We frequently hear that we live in an extremely volatile, uncertain, complex and ambiguous (VUCA) world. How are we equipped to address, and to intervene in such a world? What skillset have we developed to help us in our journey of creating new order out of the chaotic and intricate nature of this world?

### TOPIC

Systems thinking helps us expand our understanding of the interrelationships between events that are distant in time and space and assist us in finding meaningful similarities across “seemingly” different phenomena. The systems thinking models and tools will hone our intuition and boost our capacity to learn, and to continuously reinvent ourselves and to refine our perception of the world and our relationship to it.



### OBJECTIVES

The objective of this course is to provide thinking tools and reflection mechanisms that can help us in enhancing the quality of our observations and increasing effectiveness of our decisions. Managers, product and service designers, organizational decision makers, start-up founders, researchers, members of research and development teams, environmental activists, NGO members, or anyone working in contexts in which human behavior play an important role can be a target audience for this course.

### STRUCTURE

- 6 interactive live sessions (each lasting 100 minutes) on Zoom.
- There will be a maximum number of 10 participants in the training.
- The sessions include debriefing, reflection, questions and answers.
- The participants are required to do some readings and/or watching a movie before the sessions.
- The participants are encouraged to bring examples and cases from their professional experience.
- A plethora of learning design techniques such as facilitated group dialogue; computer simulation and visualizations will be used throughout the training course.

### CERTIFICATE OF ATTENDANCE

Participants who attend at least 4 out of 6 sessions will receive a certificate of attendance stating the course content and contact hours from an accredited university in Switzerland.

### COST OF TRAINING

For more information about the tuition fee for the training course you can contact me directly:  
[arash.golnam@gmail.com](mailto:arash.golnam@gmail.com)

## TRAINING COURSE CONTENTS

The tentative contents of this training course are as follows:

### **Session 1: Systems, thinking, and systems thinking**

*Exploring the origins and the principles of systems thinking; silo versus holistic thinking, dynamic versus detailed complexity, non-linearity, recursion and emergence.*

### **Session 2: Causal tracing and diagramming**

*Developing insights into complexity by visualizing and mapping cause-effect relationships between elements within a system that are distant in time and space.*

### **Session 3: Systems archetypes**

*Gaining an understanding of the commonly recurring patterns of behavior in a system, such as limits to growth, shifting the burden and tragedy of the commons.*

### **Session 4: Patterns of behavior**

*Developing an intuitive understanding of the dynamic behavior of a system over time such as exponential growth and decline, s-shaped growth and overshoot and collapse.*

### **Session 5: Leverage points in systems**

*Enhancing capability to intervene in complex systems by examining the leverage points or the places for an effective intervention in a system.*

### **Session 6: Learning in and about complex systems**

*Developing our capacity of learning how to learn in complex systems; refining our mental models, thought patterns and decision rules.*

## INSTRUCTOR

**Dr. Arash Golnam** [www.golnam.net](http://www.golnam.net)

*University Lecturer and Systems Scientist*

Arash completed his Ph.D. in Management of Technology (Systems Modeling) at Ecole Polytechnique Fédérale de Lausanne (EPFL) and holds a Master of Science in System Dynamics (summa cum laude) from Worcester Polytechnic Institute (WPI).

His experience includes working as a system dynamicist on large scale simulation platforms of socio-technical systems. Currently, he works part-time as a scientist at EPFL, researching the application of systems theory and principles in designing services.

Arash teaches systems thinking and system dynamics at universities in Geneva and Lausanne area, where he has been awarded as the distinguished member of the faculty several times in the recent years.

